This document gives pertinent information concerning the reissuance of the VPDES Permit listed below. This permit is being processed as a Minor, Industrial permit. The non-contact cooling water discharge results from the operation of a central air conditioning facility. This permit action consists of updating the proposed effluent limits to reflect the current Virginia WQS (effective January 6, 2011) and updating permit language as appropriate. The effluent limitations and special conditions contained in this permit will maintain the Water Quality Standards of 9VAC25-260-00 et seq.

1.	Facility Name and Mailing Address:	Reston Lake Anne Air Conditioning Corp. 2414 Granite Ridge Road Rockville, VA 23146	SIC Code :	4961 – Air Conditioning Supply
	Facility Location:	11485 Washington Plaza West Reston, VA 20190	County:	Fairfax
	Facility Contact Name:	Mr. Luther Ghorley	Telephone Number:	(804) 749-8868
2.	Permit No.:	VA0091995	Expiration Date of previous permit:	January 17, 2012
	Other VPDES Permits associated with this facility:		None	
	Other Permits associated with this facility:		None	
	E2/E3/E4 Status:	NA		
3.	Owner Name:	Aqua Virginia		
	Owner Contact/Title:	Mr. Luther Ghorley / Area Manager	Telephone Number:	(804) 749-8868
4.	Application Complete Date:	July 25, 2011		
	Permit Drafted By:	Susan Mackert	Date Drafted:	September 28, 2011
	Draft Permit Reviewed By:	Alison Thompson	Date Reviewed:	October 11, 2011
	WPM Review By:	Bryant Thomas	Date Reviewed:	November 2, 2011
	Public Comment Period :	Start Date: December 2, 2011	End Date:	January 2, 2012

5. Receiving Waters Information:

Receiving Stream Name :	Lake Anne	Stream Code:	1aXJJ
Drainage Area at Outfall:	0.83 square miles	River Mile:	0.78
Stream Basin:	Potomac River	Subbasin:	Potomac River
Section:	9	Stream Class:	III
Special Standards:	b	Waterbody ID:	VAN-A11L
7Q10 Low Flow:	NA (discharge to lake)	7Q10 High Flow:	NA (discharge to lake)
1Q10 Low Flow:	NA (discharge to lake)	1Q10 High Flow:	NA (discharge to lake)
30Q10 Low Flow:	NA (discharge to lake)	30Q10 High Flow:	NA (discharge to lake)
Harmonic Mean Flow:	NA (discharge to lake)	30Q5 Flow:	NA (discharge to lake)
303(d) Listed:	Receiving Stream - No		
303(d) Listed:	Downstream (Difficult Run) – Yes (aquatic life, recreation)		
TMDL Approved:	Receiving Stream - NA		
TMDL Approved:	Downstream (Difficult Run) - Yes	Date TMDL Approved:	11-7-08 (bacteria)
TMDL Approved:	Downstream (Difficult Run) - Yes	Date TMDL Approved:	11-7-08 (sediment)

Per 9VAC25-260-20, mixing zones shall not be allowed for effluents discharged to wetlands, swamps, marshes, lakes or ponds.

6. Statutory or Regulatory Basis for Special Conditions and Effluent Limitations:

✓	State Water Control Law		EPA Guidelines
✓	Clean Water Act	✓	Water Quality Standards
✓	VPDES Permit Regulation	✓	Other: 9VAC25-196 (General Permit for Non-Contact Cooling Water Discharges)
✓	EPA NPDES Regulation		

7. Licensed Operator Requirements: NA

8. Reliability Class: NA

9. Permit Characterization:

✓	Private	✓	Effluent Limited		Possible Interstate Effect
	Federal	✓	Water Quality Limited		Compliance Schedule Required
	State		Toxics Monitoring Program Required		Interim Limits in Permit
	POTW		Pretreatment Program Required		Interim Limits in Other Document
	TMDL				

10. Wastewater Sources and Treatment Description:

Reston Lake Anne Air Conditioning (RELAC) is a privately owned utility that provides central air conditioning to ten properties comprised of approximately 2,000 customers surrounding Lake Anne in the City of Reston. The system is operational from May to October.

Water is withdrawn from Lake Anne (a 25 acre storm water retention pond) at its highest point and is passed through intake screens to remove debris. Debris is removed manually from the screens on a daily basis and is placed on shore to serve as mulch and is not returned to the lake. Additionally, water is passed through 20 strainers within the "plant" prior to being pumped through the system. The strainers are manually cleaned on a daily basis. After passing through the strainers, water is then pumped by one of four Worthington 40 hp pumps to one of four 400 ton Carrier chillers each with a design flow of 1200 gpm. Two chillers are used at a time to provide chilled water which runs through approximately 18 miles of underground pipe to each home within the community. The chillers are cleaned once per month with a wire brush and without the use of chemicals.

When lake levels fall below six feet, the system must shut down or operators must attempt to secure the release of water from upstream lakes. At no time is water pulled from a chlorinated city source. Concrete pads are in place for the addition of two cooling towers to provide air conditioning to the residential community during drought conditions. However, due to noise concerns and aesthetics the project has not gone forward.

Chemicals are not added to the system to adjust pH, inhibit corrosion and scale build-up or to reduce biological growth.

Discharge from the facility is comprised solely of once through non-contact cooling water. At this time, all discharge from the facility is discharged through an outfall (001) back to Lake Anne downstream of the intake. The discharge location is located along the main portion of the lake approximately three feet under the water. During peak summer demand, flows can reach up to 3.5 MGD while during winter months there is no discharge.

See Attachment 1 for the NPDES Permit Rating Worksheet.
See Attachment 2 for a facility schematic/diagram.

TABLE 1 – Outfall Description				
Outfall Number	**Discharge Sources**	**Treatment**	**Average Daily Flow**	**Outfall Latitude and Longitude**
001	Industrial Wastewater (non-contact cooling water)	None	2.6 MGD	38° 57' 54? N 77° 20' 15? W
See Attachment 3 for (Vienna, DEQ #205A) topographic map.				

11. Sludge Treatment and Disposal Methods:

RELAC is a privately owned utility that provides central air conditioning to properties surrounding Lake Anne. The facility does not produce sewage sludge and does not treat domestic sewage.

12. Discharges, Intakes, Monitoring Stations, Other Items in Vicinity of Discharge in Waterbody VAN-A11L: The monitoring stations listed below are within a two mile radius of the discharge location. Please see Attachment 4 for a list of all other facilities and monitoring stations located within the waterbody VAN-A11L.

TABLE 2	
1aCOV003.32	DEQ monitoring station located on Colvin Run at the Wiehle Avenue (Route 828) bridge crossing.
1aXJJ-DR20-SOS	Citizen monitoring station located at the outlet of Lake Anne which flows to an unnamed tributary to Colvin Run.

13. Material Storage:

TABLE 3 - Material Storage		
Materials Description	Volume Stored	Spill/Stormwater Prevention Measures
Refrigerant R113	20 gallons	Within brick building
Water Treatment Nitrite	5 – 5 gallon buckets	Within brick building
Gasoline	5 gallons	Within brick building
Orange Hand Cleaner	1 gallon	Within brick building
W.D. 40	22 ounces	Within brick building
Pipe Joint Compound	16 ounces	Within brick building
CPVC Cement	48 ounces	Within brick building
PVC Purple Primer	80 ounces	Within brick building
Coil Cleaner	1 gallon	Within brick building
Paint	5 gallons	Within brick building
Refrigerant Oil	1 gallon	Within brick building
Formula 50 All Purpose Cleaner	16 ounces	Within brick building
Water Treatment Nitrite mixed with water	16 ounces	Within brick building

14. Site Inspection:

Performed by Susan Mackert, Burt Tuxford, and Elleanore Daub on October 13, 2011. The site visit confirms that the application package received on July 21, 2011, is accurate and representative of actual site conditions. The site visit memo can be found as Attachment 5.

15. Receiving Stream Water Quality and Water Quality Standards:

a) Ambient Water Quality Data

The nearest Department of Environmental Quality ambient monitoring station, 1aCOV000.22, is located approximately 2.73 rivermiles downstream from the outfall location on Colvin Run at the Carper Farm Way bridge crossing. However, a citizen monitoring station (1aXJJ-DR20-SOS) is located at the outlet of Lake Anne which flows to an unnamed tributary to Colvin Run. Data collected by the citizen monitoring group indicates that a water quality issue may exist for the aquatic life use, however, the methodology and/or data quality has not been approved for such a determination. Citizen monitoring finds a high probability of adverse conditions for biota. The fish consumption, recreation, and wildlife uses were not assessed. The receiving stream, Lake Anne, is not listed on the current 303(d) list.

The 2010 Virginia Water Quality Assessment 305(b)/303(d) Integrated Report (IR) gives an impaired classification for the following downstream locations:

- Aquatic Life Use

  Difficult Run: Two biological monitoring events in 2005, one of two biological monitoring events in 2006, and two biological monitoring events in 2007 at station 1aDIF000.86 resulted in a Virginia Stream Condition Index (VSCI) score which indicates an impaired macroinvertebrate community, as does the mean score of these six samples. Additionally, two biological monitoring events in 2007 at station 1aDIF000.80 resulted in a VSCI score which indicates an impaired macroinvertebrate community.

- Recreation Use Impairment

  Difficult Run: Sufficient excursions from the maximum *E. coli* bacteria criterion (5 of 21 samples – 23.8%) were recorded at DEQ's ambient monitoring station 1aDIF000.86 at the Route 193 crossing to assess this stream segment as not supporting of the recreation use goal for the 2010 water quality assessment.

- Fish Consumption Use (Heptachlor Epoxide)

  Difficult Run: Excursions above the water quality criterion based tissue screening value (TV) of 12 parts per billion (ppb) for heptachlor expoxide in fish tissue were recorded in one specie of fish (American eel) in 2001 and 2004, collected at monitoring station 1DIF000.86.

- Fish Consumption Use (PCB)

  Difficult Run: The fish consumption use is categorized as impaired due to a Virginia Department of Health, Division of Health Hazards Control, Polychlorinated Biphenyl (PCB) fish consumption advisory. The advisory, dated 12/13/04, limits consumption of American eel to no more than two meals per month. The affected area includes the following tributaries between the Virginia/Maryland state line near the Route 340 bridge (Loudoun County) to the I-395 bridge in Arlington County (above the Woodrow Wilson Bridge): Goose Creek up to the Dulles Greenway road Bridge, Broad Run up to the Route 625 bridge, Difficult Run up to the Route 7 bridge, and Pimmitt Run up to the Route 309 bridge.

The following Total Maximum Daily Load (TMDL) studies have been completed for Difficult Run.

- Recreation Use – 11/7/08
- Aquatic Life Use – 11/7/08

The following Total Maximum Daily Load (TMDL) schedules have been established.

- Fish Consumption Use (Heptachlor Epoxide) – 2018
- Fish Consumption Use (PCBs) – 2018

The complete planning statement is found as Attachment 6.

b) Receiving Stream Water Quality Criteria

Part IX of 9VAC25-260(360-550) designates classes and special standards applicable to defined Virginia river basins and sections. The receiving stream, Lake Anne, is located within Section 9 of the Potomac River Basin, and classified as a Class III water.

At all times, Class III waters must achieve a dissolved oxygen (D.O.) of 4.0 mg/L or greater, a daily average D.O. of 5.0 mg/L or greater, a temperature that does not exceed 32°C, and maintain a pH of 6.0-9.0 standard units (S.U.).

Attachment 7 details other water quality criteria applicable to the receiving stream.

Ammonia:
With this reissuance, staff has re-evaluated the effluent data for pH and temperature. The facility is nearing completion of its first permit cycle under an individual permit and data that is more reflective of the facility's operations under this permit is available. As such, it is staff's best professional judgement that a data review is appropriate.

The 7Q10 and 1Q10 of the receiving stream are assumed to be 0.0 MGD as the discharge is to a lake and mixing zones are not allowed. In cases such as this, 90th percentile effluent pH and temperature data may be used to establish the ammonia water quality criteria. The 90th percentile pH was derived from DMR submissions dated June 2007 to June 2011 and was determined to be 7.6 S.U. The 90th percentile temperature was derived from DMR submissions dated June 2007 to June 2011 and was determined to be 31ºC. The ammonia water quality standards calculations are shown in Attachment 7.

The VPDES General Permit for Non-Contact Cooling Water Discharges *(*9VAC25-196) requires monitoring when the source of cooling water is disinfected using chloramines. Because the source of water utilized by the facility is withdrawn directly from Lake Anne and is not disinfected, it is staff's best professional judgement that neither ammonia monitoring nor ammonia limits are warranted for the discharge.

Metals Criteria:
The Water Quality Criteria for some metals are dependent on the receiving stream's hardness (expressed as mg/L calcium carbonate). The 7Q10 of the receiving stream is assumed to be zero and no ambient data is available, the effluent data for hardness can be used to determine the metals criteria. The hardness-dependent metals criteria in Attachment 7 are based on an average effluent value of 52 mg/L derived from DMR submissions dated June 2007 to June 2011.

c) Receiving Stream Special Standards

The State Water Control Board's Water Quality Standards, River Basin Section Tables (9VAC25-260-360, 370 and 380) designates the river basins, sections, classes, and special standards for surface waters of the Commonwealth of Virginia. The receiving stream, Lake Anne, is located within Section 9 of the Potomac River Basin. This section has been designated with a special standard of "b".

Special Standard "b" (Potomac Embayment Standards) established effluent standards for all sewage plants discharging into Potomac River embayments and for expansions of existing plants discharging into non-tidal tributaries of these embayments. 9VAC25-415, Policy for the Potomac Embayments controls point source discharges of conventional pollutants into the Virginia embayment waters of the Potomac River, and their tributaries, from the fall line at Chain Bridge in Arlington County to the Route 301 bridge in King George County. The Potomac Embayment Standards are not applied to this discharge as the facility is not a sewage treatment plant and the discharge does not contain the pollutants of concern in appreciable amounts.

d) Threatened or Endangered Species

The Virginia DGIF Fish and Wildlife Information System Database was searched on September 26, 2011, for records to determine if there are threatened or endangered species in the vicinity of the discharge. The following threatened or endangered species were identified within a 2 mile radius of the discharge: Brook Floater, Wood Turtle, Upland Sandpiper, Loggerhead Shrike, Henslow's Sparrow, Appalachian Grizzled Skipper, Bald Eagle, and Migrant Loggerhead Shrike. The limits proposed in this draft permit are protective of the Virginia Water Quality Standards and protect the threatened and endangered species found near the discharge.

16. Antidegradation (9VAC25-260-30):

All state surface waters are provided one of three levels of antidegradation protection. For Tier 1 or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier 2 water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier 2 waters is not allowed without an evaluation of the economic and social impacts. Tier 3 water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

The receiving stream has been classified as Tier 1 because of the urban land use within the drainage area and the associated water quality. It is staff's best professional judgment that such streams are Tier I since the limits are set to meet the WQS. Permit limits proposed have been established by determining wasteload allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These wasteload allocations will provide for the protection and maintenance of all existing uses.

17. Effluent Screening, Wasteload Allocation, and Effluent Limitation Development:

To determine water quality-based effluent limitations for a discharge, the suitability of data must first be determined. Data is suitable for analysis if one or more representative data points is equal to or above the quantification level ("QL") and the data represent the exact pollutant being evaluated.

Next, the appropriate Water Quality Standards (WQS) are determined for the pollutants in the effluent. Then, the Wasteload Allocations (WLA) are calculated. In this case since the critical flows 7Q10 and 1Q10 are assumed to be zero, the WLA's are equal to the WQS. The WLA values are then compared with available effluent data to determine the need for effluent limitations. Effluent limitations are needed if the 97th percentile of the daily effluent concentration values is greater than the acute wasteload allocation or if the 97th percentile of the four-day average effluent concentration values is greater than the chronic wasteload allocation. Effluent limitations are based on the most limiting WLA, the required sampling frequency, and statistical characteristics of the effluent data.

a) Effluent Screening:
Effluent data obtained from DMR submissions, Attachment A monitoring required by the prior permit (2007 – 2012), and the permit application has been reviewed and determined to be suitable for evaluation.

The following pollutants require a wasteload allocation analysis*:* Antimony, Copper, and Zinc.

b) Mixing Zones and Wasteload Allocations (WLAs):
Wasteload allocations (WLAs) are calculated for those parameters in the effluent with the reasonable potential to cause an exceedance of water quality criteria. The basic calculation for establishing a WLA is the steady state complete mix equation:

$$WLA = \frac{C_o [Q_e + (f) (Q_s)] - [(C_s) (f) (Q_s)]}{Q_e}$$

Where:
- WLA = Wasteload allocation
- C_o = In-stream water quality criteria
- Q_e = Design flow
- Q_s = Critical receiving stream flow (1Q10 for acute aquatic life criteria; 7Q10 for chronic aquatic life criteria; 30Q10 for ammonia criteria; harmonic mean for carcinogen-human health criteria; and 30Q5 for non-carcinogen human health criteria)
- f = Decimal fraction of critical flow
- C_s = Mean background concentration of parameter in the receiving stream.

The water segment receiving the discharge via Outfall 001 is considered to have a 7Q10 and 1Q10 of 0.0 MGD. As such, there is no mixing zone and the WLA is equal to the C_o.

c) Effluent Limitations Toxic Pollutants, Outfall 001 –

9VAC25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an in-stream excursion of water quality criteria. Those parameters with WLAs that are near effluent concentrations are evaluated for limits.

The VPDES Permit Regulation at 9VAC25-31-230.D. requires that monthly and weekly average limitations be imposed for continuous discharges from POTWs and monthly average and daily maximum limitations be imposed for all other continuous non-POTW discharges.

The State Water Control Board has adopted a general VPDES permit for point source discharges of cooling water and cooling equipment blowdown to municipal separate storm sewer systems and surface waters (9VAC25-196). The discharge volume from Reston Lake Anne Air Conditioning excludes the facility from coverage under the general permit. However, the permit does serve as a guideline on which to develop the facility's effluent limitations and monitoring requirements.

1) Total Residual Chlorine (TRC):

TRC monitoring and effluent limits are not proposed with this reissuance as the source of the cooling water (Lake Anne) is not chlorinated. This approach is consistent with the VPDES General Permit for Non-Contact Cooling Water Discharges *(*9VAC25-196).

2) Metals:

a) Antimony

An Antimony value of 33 µg/L was reported as part of the Attachment A sampling required with the reissuance. This result exceeded the quantification level, thereby requiring a WLA analysis. While Antimony was detected, it is staff's best professional judgement that there is no reasonable potential to exceed the human health criteria of 640 µg/L (see Attachment 7). Therefore, no further evaluation or monitoring is required.

b) Copper

Copper is a common pollutant of concern from this type of an industrial discharge. Data analysis from DMR submissions dated June 2007 – June 2011 indicates the need for a monthly average and daily maximum copper limit of 7.3µg/L (see Attachment 7). Because sufficient data exists for limit derivation, it is staff's best professional judgement that a monthly average and daily maximum copper limit of 7.3µg/L be implemented with this reissuance. Continued quarterly monitoring (1/3M) and a Schedule of Compliance are proposed with this reissuance. See Section 20.b of this Fact Sheet for additional discussion.

c) Zinc

Zinc is a common pollutant of concern from this type of an industrial discharge. Data analysis from DMR submissions dated June 2007 to June 2011 does not indicate the need for an average monthly zinc limitation (see Attachment 7). Monitoring for zinc, without specific limitations, shall be carried forward with this reissuance. The metals monitoring is consistent with the VPDES General Permit for Non-Contact Cooling Water Discharges *(*9VAC25-196). As such, the quarterly monitoring frequency (1/3M) shall be carried forward with this reissuance.

d) Effluent Limitations and Monitoring, Outfall 001 – Conventional and Non-Conventional Pollutants

1) pH:

No changes to established pH limitations are proposed. As such, a minimum limit of 6.0 S.U. and a maximum limit of 9.0 S.U. shall be carried forward with this reissuance. Limitations for pH are set at the water quality criteria and are consistent with the VPDES General Permit for Non-Contact Cooling Water Discharges *(*9VAC25-196).

The existing permit requires monitoring for pH on a quarterly basis. With this reissuance the quarterly monitoring frequency (1/3M) shall be carried forward.

2) Temperature:

No changes to established temperatures limitations are proposed. As such, a maximum temperature limit of 32°C shall be carried forward with this reissuance. The limitation for temperature is based upon the Water Quality Standards (9VAC25-260-50) and is consistent with the VPDES General Permit for Non-Contact Cooling Water Discharges *(*9VAC25-196).

The existing permit requires monitoring for temperature on a quarterly basis. With this reissuance the quarterly monitoring frequency (1/3M) shall be carried forward.

3) Total Hardness:

Monitoring for hardness, without specific limitations, shall be carried forward with this reissuance. The hardness monitoring is consistent with the VPDES General Permit for Non-Contact Cooling Water Discharges (9VAC25-196).

The existing permit requires monitoring for hardness on a quarterly basis. With this reissuance the quarterly monitoring frequency (1/3M) shall be carried forward.

4) Total Phosphorus:

Monitoring for phosphorus, without specific limitations, shall be carried forward with this reissuance. The phosphorus monitoring is consistent with the VPDES General Permit for Non-Contact Cooling Water Discharges (9VAC25-196).

The existing permit requires monitoring for phosphorus on a quarterly basis. With this reissuance the quarterly monitoring frequency (1/3M) shall be carried forward.

e) Effluent Limitations and Monitoring Summary.

The effluent limitations are presented in the following table. Limits were established for pH, Total Recoverable Copper, and Temperature.

Sample Type is in accordance with the recommendations in the VPDES Permit Manual, and the VPDES General Permit for Non-Contact Cooling Water Discharges (9VAC25-196).

18. Antibacksliding:

All limits in this permit are at least as stringent as those previously established. Backsliding does not apply to this reissuance.

19. Effluent Limitations/Monitoring Requirements: Outfall 001 (Non-Contact Cooling Water)

Average flow is 2.6 MGD.

Effective Dates: During the period beginning with the permit's effective date and lasting until the expiration date.

PARAMETER	BASIS FOR LIMITS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
		Monthly Average	Daily Maximum	Minimum	Maximum	Frequency[(a)]	Sample Type
Flow (MGD)	NA	NL	NA	NA	NL	1/3M	Estimate
pH	1,3	NA	NA	6.0 S.U.	9.0 S.U.	1/3M	Grab
Temperature (^oC)	1,3	NA	32^oC	NA	NA	1/3M	IS
Total Hardness (mg/L as $CaCO_3$)	1,3	NA	NL	NA	NA	1/3M	Grab
Total Phosphorus (mg/L)	1,3	NA	NL	NA	NA	1/3M	Grab
Total Recoverable Copper (µg/L)	1,2,3	7.3 µg/L	7.3 µg/L	NA	NA	1/3M	Grab
Total Dissolved Zinc (µg/L)	1,3	NA	NL	NA	NA	1/3M	Grab

The basis for the limitations codes are:

1. Water Quality Standards
2. Best Professional Judgement
3. 9VAC25-196 (General Permit for Non-Contact Cooling Water Discharges)

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
IS = Immersion stabilization.
1/3M = Once every three months.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.
Grab = An individual sample collected over a period of time not to exceed 15-minutes.

a. The quarterly monitoring periods shall be January 1 - March 31, April 1 - June 30, July 1 - September 30, and October 1 - December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (April 10, July 10, October 10 and January 10, respectively).

b. During the compliance period established in Part I.C, there shall be no limits, only monitoring for Total Recoverable Copper.

20. Other Permit Requirements:

a) Part I.B. of the permit contains quantification levels and compliance reporting instructions.

9VAC25-31-190.L.4.c. requires an arithmetic mean for measurement averaging and 9VAC25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an in-stream excursion of water quality criteria. Specific analytical methodologies for toxics are listed in this permit section as well as quantification levels (QLs) necessary to demonstrate compliance with applicable permit limitations or for use in future evaluations to determine if the pollutant has reasonable potential to cause or contribute to a violation. Required averaging methodologies are also specified.

b) Part I.C. of the permit details the requirements for a Schedule of Compliance for Total Recoverable Copper.

The VPDES Permit Regulation, 9VAC25-31-250 allows use of Compliance Schedules to allow facilities sufficient time for upgrades to meet newly established effluent limits. The permit contains newly established limits for copper.

Since the facility is now required to meet these limits a schedule of compliance is required to provide the permittee time to evaluate and determine if these limits can be met and if an upgrade to this facility is needed to meet these new limits. The permittee shall achieve compliance with the final limits specified in Part I.A. of the VPDES permit in accordance with the following schedule as contained in Part I.C. of the permit:

Action	Time Frame
1. Submit a plan to achieve compliance with final copper limits.	A plan shall be submitted 90 days from the effective date of the permit (April 18, 2012).
2. Report biannually of progress on attainment of final copper limits.	By July 18, 2012, January 18, 2013, July 18, 2013, January 18, 2014, July 18, 2014, January 18, 2015, July 18, 2015, and January 18, 2016.
3. Achieve compliance with final copper limits.	Within 60 days of the completion of compliance plan activities and implementation of the corrective measure(s) but no later than four (4) years from the effective date of the permit (January 18, 2016).

21. Other Special Conditions:

a) O&M Manual Requirement. Required by VPDES Permit Regulation, 9VAC25-31-190.E. The permittee shall submit for approval a revised Operations and Maintenance (O&M) Manual or a statement confirming the accuracy and completeness of the current O&M Manual to the Department of Environmental Quality, Northern Regional Office (DEQ-NRO) by April 18, 2012. Future changes to the facility must be addressed by the submittal of a revised O&M Manual within 90 days of the changes. Non-compliance with the O&M Manual shall be deemed a violation of the permit.

b) Water Quality Criteria Reopener. The VPDES Permit Regulation at 9VAC25-31-220 D. requires establishment of effluent limitations to ensure attainment/maintenance of receiving stream water quality criteria. Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.

c) Notification Levels. The permittee shall notify the Department as soon as they know or have reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

(1) One hundred micrograms per liter;

(2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;

(3) Five times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the Board.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

(1) Five hundred micrograms per liter;

(2) One milligram per liter for antimony;

(3) Ten times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the Board.

d) Nutrient Reopener. 9VAC25-40-70 A authorizes DEQ to include technology-based annual concentration limits in the permits of facilities that have installed nutrient control equipment, whether by new construction, expansion or upgrade. 9VAC25-31-390 A authorizes DEQ to modify VPDES permits to promulgate amended water quality standards.

e) Materials Handling/Storage. 9VAC25-31-50 A prohibits the discharge of any wastes into State waters unless authorized by permit. Code of Virginia §62.1-44.16 and §62.1-44.17 authorize the Board to regulate the discharge of industrial waste or other waste.

f) Cooling Tower Systems. The permittee shall at all times properly operate and maintain all cooling water systems.

g) Cooling Tower Blowdown. The discharge of cooling tower blowdown is prohibited for three (3) consecutive days after the cooling tower receives shock treatment with non-oxidizing biocide.

h) Cooling Tower Additives. The use of any chemical additive(s) not identified in the registration statement, except chlorine, is prohibited without prior approval of DEQ-NRO. Prior approval shall be obtained from DEQ-NRO before any changes are made to the chemical and/or non-chemical treatment technology employed in the cooling water system. Requests for approval of the change shall be made in writing and shall include the following information:

a. Describe the chemical and/or non-chemical treatment to be employed and its purpose; if chemical additives are used, provide the information prescribed below;
b. Provide the name and manufacturer of each additive used;
c. Provide a list of active ingredients and percentage consumption;
d. Provide the proposed schedule and quantity of chemical usage, and estimate the concentration in the discharge;
e. Attach available aquatic toxicity information for each additive proposed for use; and

Attach any other information such as product or constituent degradation, fate, transport, synergies, bioavailability, etc. that will aid the Board with the toxicity evaluation for the discharge.

Permit Section Part II. Part II of the permit contains standard conditions that appear in all VPDES Permits. In general, these standard conditions address the responsibilities of the permittee, reporting requirements, testing procedures and records retention.

22. Changes to the Permit from the Previously Issued Permit:

a) Special Conditions:
   1. A Cooling Tower Blowdown special condition was added with this reissuance to be consistent with the VPDES General Permit for Non-Contact Cooling Water Discharges (9VAC25-196).
   2. The Water Quality Monitoring Reopener special condition was removed with this reissuance as the facility completed this monitoring under the existing permit and no changes to facility operations have taken place.
   3. A four year compliance schedule has been included for Total Recoverable Copper. Final compliance shall be achieved by January 18, 2016.

b) Monitoring and Effluent Limitations:
   1. A monthly average and daily maximum copper limit of 7.3 µg/L has been implemented with this reissuance. During the compliance period established in Part I.C, there shall be no limits for copper, only monitoring.

23. Variances/Alternate Limits or Conditions: NA

24. Public Notice Information:

First Public Notice Date: December 1, 2011 Second Public Notice Date: December 8, 2011

Public Notice Information is required by 9VAC25-31-280 B. All pertinent information is on file and may be inspected, and copied by contacting the: DEQ Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193, Telephone No. (703) 583-3853, susan.mackert@deq.virginia.gov. See Attachment 8 for a copy of the public notice document.

Persons may comment in writing or by email to the DEQ on the proposed permit action, and may request a public hearing, during the comment period. Comments shall include the name, address, and telephone number of the writer and of all persons represented by the commenter/requester, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The DEQ may decide to hold a public hearing, including another comment period, if public response is significant and there are substantial, disputed issues relevant to the permit. Requests for public hearings shall state 1) the reason why a hearing is requested; 2) a brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requester, including how and to what extent such interest would be directly and adversely affected by the permit; and 3) specific references, where possible, to terms and conditions of the permit with suggested revisions. Following the comment period, the Board will make a determination regarding the proposed permit action. This determination will become effective, unless the DEQ grants a public hearing. Due notice of any public hearing will be given. The public may request an electronic copy of the draft permit and fact sheet or review the draft permit and application at the DEQ Northern Regional Office by appointment.

25. 303 (d) Listed Stream Segments and Total Max. Daily Loads (TMDL):

The receiving stream, Lake Anne, is not listed on the current 303(d) list. However, there are downstream listed 303(d) impairments for Difficult Run. TMDLs have been completed to address the aquatic life and recreation impairments. The facility was not given a waste load allocation in the TMDL as it was not expected to discharge the pollutant of concern.

TMDL Reopener: This special condition is to allow the permit to reopened if necessary to bring it in compliance with any applicable TMDL that may be developed and approved for the receiving stream.

26. Additional Comments:
Previous Board Action(s): None

Staff Comments: With the initial issuance of the permit in 2007, the EPA Guidelines box was checked in Section 6 of the Fact Sheet (Statutory or Regulatory Basis for Special Conditions and Effluent Limitations). This item was not checked with this reissuance as Federal Effluent Guidelines are not applicable to this classification of industrial discharger.

Staff Comments: With this reissuance staff adjusted the NPDES Permit Rating Worksheet (Attachment 1) to reflect a public drinking water supply located within 50 miles downstream of the effluent discharge; the Dalecarlia Water Treatment Plant intake at Little Falls operated by the United States Army Corp of Engineers Washington Aqueduct Division. The facility's SIC Code (4961 – Steam Supply) places the facility in toxicity group one which requires applying a total points factor of zero from this toxicity group. This adjustment has no significant change on the facility's industrial rating. The facility is still considered an industrial minor and warrants no change to the permit.

Public Comment: By letter dated December 21, 2011, the facility provided comments on the proposed copper limit for Outfall 001. The letter details discussion points from a December 13, 2011, conference call on the draft permit outlining plans for an evaporative cooling system and requesting a "monitor only" provision for copper for at least one year, and inclusion of a copper limit in a subsequent year based on monitoring by the facility. The draft permit includes a four year compliance schedule for copper, with a final limit becoming effective on January 16, 2016. It is staff's best professional judgement that no further action with respect to the copper limit is warranted.

EPA Checklist: The checklist can be found in Attachment 9.

Fact Sheet Attachments – Table of Contents

Reston Lake Anne Air Conditioning (RELAC)
VA0091995

2012 Reissuance

NPDES PERMIT RATING WORK SHEET

[X] Regular Addition
[ ] Discretionary Addition
[ ] Score change, but no status Change
[ ] Deletion

VPDES NO. : VA0091995

Facility Name: Reston Lake Anne Air Conditioning Corp.
City / County: Reston / Fairfax County
Receiving Water: Lake Anne
Waterbody ID: VAN-A11L

Is this facility a steam electric power plant (sic =4911) with one or more of the following characteristics?

1. Power output 500 MW or greater (not using a cooling pond/lake)
2. A nuclear power Plant
3. Cooling water discharge greater than 25% of the receiving stream's 7Q10 flow rater

[ ] Yes; score is 600 (stop here) [X] NO; (continue)

Is this permit for a municipal separate storm sewer serving a population greater than 100,000?

[ ] YES; score is 700 (stop here)
[X] NO; (continue)

FACTOR 1: Toxic Pollutant Potential

PCS SIC Code: _____ Primary Sic Code: 4961 Other Sic Codes: _____ _____ _____

Industrial Subcategory Code: 000 (Code 000 if no subcategory)

Determine the Toxicity potential from Appendix A. Be sure to use the TOTAL toxicity potential column and check one)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
[X] No process waste streams	0	0	[ ] 3.	3	15	[ ] 7.	7	35
[ ] 1.	1	5	[ ] 4.	4	20	[ ] 8.	8	40
[ ] 2.	2	10	[ ] 5.	5	25	[ ] 9.	9	45
			[ ] 6.	6	30	[ ] 10.	10	50

Code Number Checked: 0

Total Points Factor 1: 0

FACTOR 2: Flow/Stream Flow Volume (Complete either Section A or Section B; check only one)

Section A – Wastewater Flow Only considered

	Wastewater Type (see Instructions)		Code	Points
Type I:	Flow < 5 MGD	[X]	11	0
	Flow 5 to 10 MGD	[ ]	12	10
	Flow > 10 to 50 MGD	[ ]	13	20
	Flow > 50 MGD	[ ]	14	30
Type II:	Flow < 1 MGD	[ ]	21	10
	Flow 1 to 5 MGD	[ ]	22	20
	Flow > 5 to 10 MGD	[ ]	23	30
	Flow > 10 MGD	[ ]	24	50
Type III:	Flow < 1 MGD	[ ]	31	0
	Flow 1 to 5 MGD	[ ]	32	10
	Flow > 5 to 10 MGD	[ ]	33	20
	Flow > 10 MGD	[ ]	34	30

Section B – Wastewater and Stream Flow Considered

Wastewater Type (see Instructions)	Percent of Instream Wastewater Concentration at Receiving Stream Low Flow		Code	Points
Type I/III:	< 10 %	[ ]	41	0
	10 % to < 50 %	[ ]	42	10
	> 50%	[ ]	43	20
Type II:	< 10 %	[ ]	51	0
	10 % to < 50 %	[ ]	52	20
	> 50 %	[ ]	53	30

Code Checked from Section A or B: 11

Total Points Factor 2: 0

NPDES PERMIT RATING WORK SHEET

FACTOR 3: Conventional Pollutants

(only when limited by the permit)

A. Oxygen Demanding Pollutants: (check one) ☐ BOD ☐ COD ☐ Other: _____

Permit Limits: (check one)	Code	Points
☐ < 100 lbs/day	1	0
☐ 100 to 1000 lbs/day	2	5
☐ > 1000 to 3000 lbs/day	3	15
☐ > 3000 lbs/day	4	20

Code Number Checked: NA

Points Scored: 0

B. Total Suspended Solids (TSS)

Permit Limits: (check one)	Code	Points
☐ < 100 lbs/day	1	0
☐ 100 to 1000 lbs/day	2	5
☐ > 1000 to 5000 lbs/day	3	15
☐ > 5000 lbs/day	4	20

Code Number Checked: NA

Points Scored: 0

C. Nitrogen Pollutants: (check one) ☐ Ammonia ☐ Other: _____

Permit Limits: (check one) *Nitrogen Equivalent*	Code	Points
☐ < 300 lbs/day	1	0
☐ 300 to 1000 lbs/day	2	5
☐ > 1000 to 3000 lbs/day	3	15
☐ > 3000 lbs/day	4	20

Code Number Checked: NA

Points Scored: 0

Total Points Factor 3: 0

FACTOR 4: Public Health Impact

Is there a public drinking water supply located within 50 miles downstream of the effluent discharge (this include any body of water to which the receiving water is a tributary)? A public drinking water supply may include infiltration galleries, or other methods of conveyance that ultimately get water from the above reference supply.

☒ YES; (If yes, check toxicity potential number below) - Dalecarlia WTP intake at Little Falls operated by the USACE Washington Aqueduct Division

☐ NO; (If no, go to Factor 5)

Determine the *Human Health* potential from Appendix A. Use the same SIC code and subcategory reference as in Factor 1. (Be sure to use the *Human Health* toxicity group column – check one below)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
☐ No process waste streams	0	0	☐ 3.	3	0	☐ 7.	7	15
☒ 1.	1	0	☐ 4.	4	0	☐ 8.	8	20
☐ 2.	2	0	☐ 5.	5	5	☐ 9.	9	25
			☐ 6.	6	10	☐ 10.	10	30

Code Number Checked: 1

Total Points Factor 4: 0

NPDES PERMIT RATING WORK SHEET

FACTOR 5: Water Quality Factors

A. Is (or will) one or more of the effluent discharge limits based on water quality factors of the receiving stream (rather than technology-base federal effluent guidelines, or technology-base state effluent guidelines), or has a wasteload allocation been to the discharge

		Code	Points
[X]	YES	1	10
[ ]	NO	2	0

B. Is the receiving water in compliance with applicable water quality standards for pollutants that are water quality limited in the permit?

		Code	Points
[X]	YES	1	0
[ ]	NO	2	5

C. Does the effluent discharged from this facility exhibit the reasonable potential to violate water quality standards due to whole effluent toxicity?

		Code	Points
[ ]	YES	1	10
[X]	NO	2	0

Code Number Checked: A 1 B 1 C 2

Points Factor 5: A 10 + B 0 + C 0 = **10**

FACTOR 6: Proximity to Near Coastal Waters

A. Base Score: Enter flow code here (from factor 2) 11

Check appropriate facility HPRI code (from PCS):

	HPRI#	Code	HPRI Score
[ ]	1	1	20
[ ]	2	2	0
[X]	3	3	30
[ ]	4	4	0
[ ]	5	5	20

Enter the multiplication factor that corresponds to the flow code: 0.00

Flow Code	Multiplication Factor
11, 31, or 41	0.00
12, 32, or 42	0.05
13, 33, or 43	0.10
14 or 34	0.15
21 or 51	0.10
22 or 52	0.30
23 or 53	0.60
24	1.00

HPRI code checked : 3

Base Score (HPRI Score): 30 X (Multiplication Factor) 0.00 = 0

B. Additional Points – NEP Program

For a facility that has an HPRI code of 3, does the facility discharge to one of the estuaries enrolled in the National Estuary Protection (NEP) program (see instructions) or the Chesapeake Bay?

	Code	Points
[X]	1	10
[ ]	2	0

C. Additional Points – Great Lakes Area of Concern

For a facility that has an HPRI code of 5, does the facility discharge any of the pollutants of concern into one of the Great Lakes' 31 area's of concern (see instructions)? **NA**

	Code	Points
[ ]	1	10
[ ]	2	0

Code Number Checked: A 3 B 1 C NA

Points Factor 6: A 0 + B 10 + C 0 = **10**

NPDES PERMIT RATING WORK SHEET

SCORE SUMMARY

Factor	Description	Total Points
1	Toxic Pollutant Potential	0
2	Flows / Streamf low Volume	0
3	Conventional Pollutants	0
4	Public Health Impacts	0
5	Water Quality Factors	10
6	Proximity to Near Coastal Waters	10
	TOTAL (Factors 1 through 6)	**20**

S1. Is the total score equal to or grater than 80 ☐ YES; (Facility is a Major) ☒ NO

S2. If the answer to the above questions is no, would you like this facility to be discretionary major?

☒ NO

☐ YES; (Add 500 points to the above score and provide reason below

Reason: _____

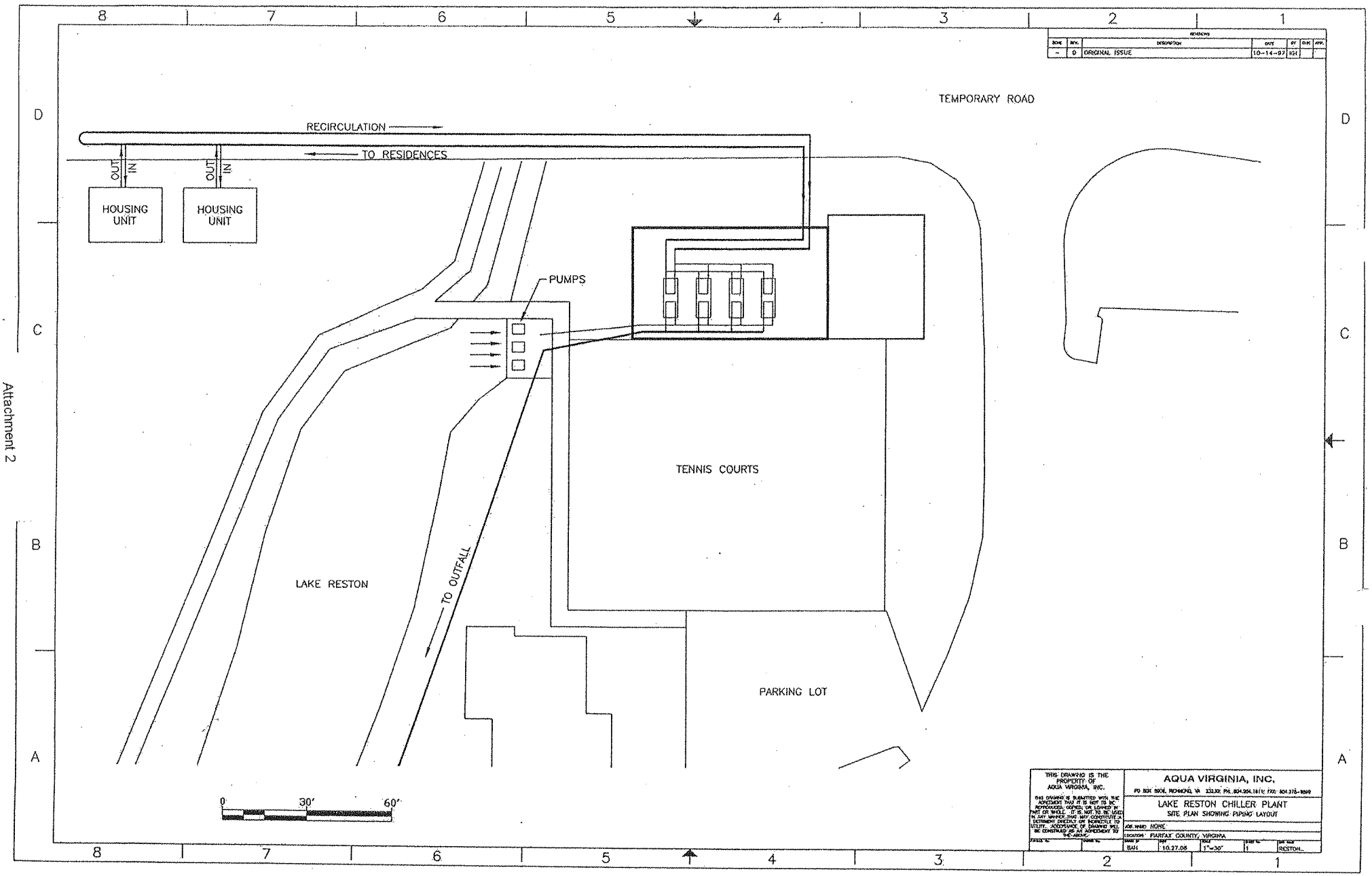
NEW SCORE : 20

OLD SCORE : 20

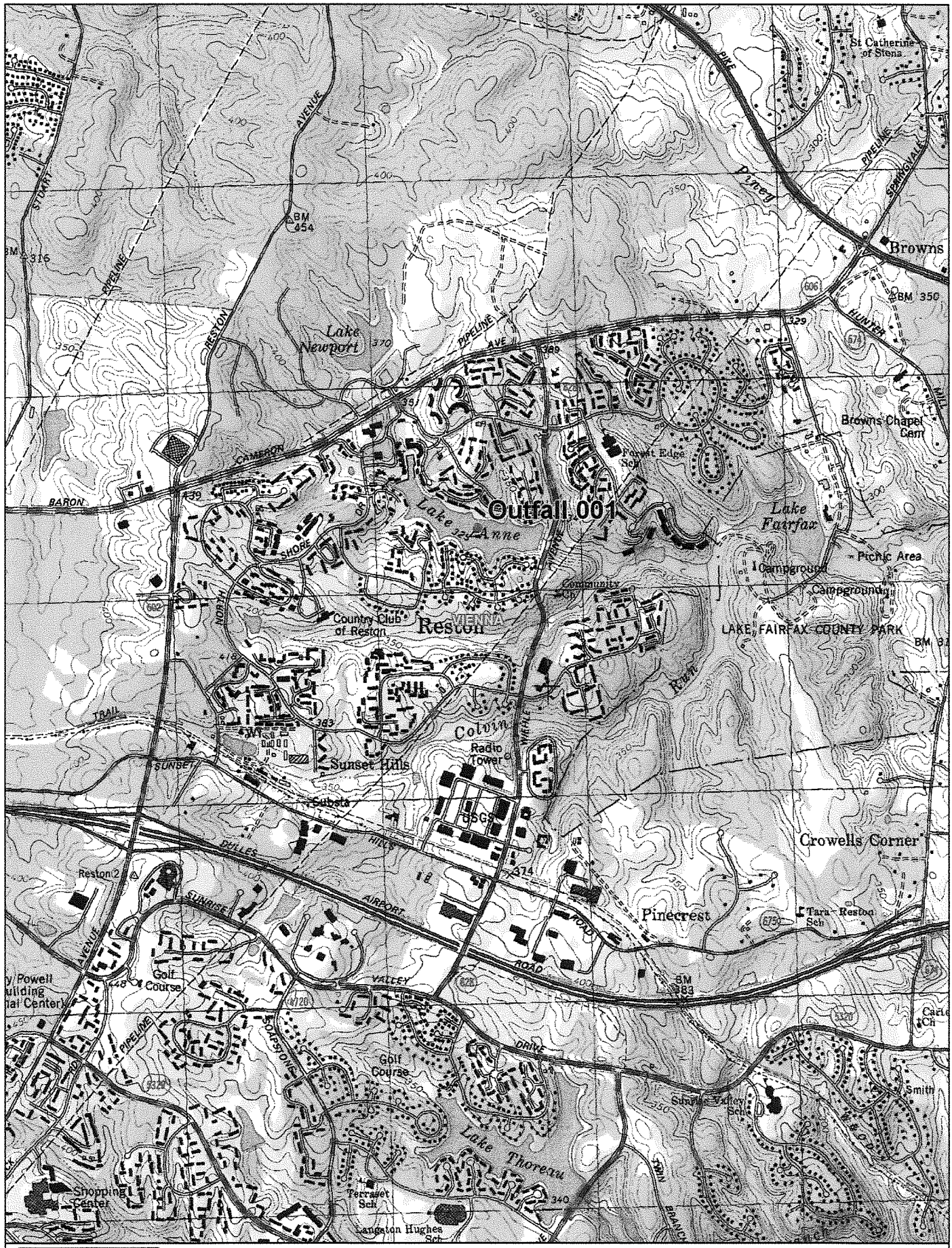
Permit Reviewer's Name : Susan Mackert

Phone Number: (703) 583-3853

Date: September 28, 2011



Attachment 2
Page 1 of 1



The facilities and monitoring stations listed below either discharge to or are located within the waterbody VAN-A11L, and are located outside of a two mile radius of the facility.	
1aCOV000.22	DEQ ambient monitoring station located on Colvin Run at the Carper Farm Way bridge crossing.
1aDIF000.80	DEQ ambient monitoring station located on Difficult Run 100 yards downstream from the Route 193 bridge crossin.
1aDIF000.86	DEQ ambient monitoring station located on Difficult Run at the Route 193 bridge crossing.
1aXJJ-DR20-SOS	Citizen monitoring station located at the outlet of Lake Anne which flows to an unnamed tributary of Colvin Run.
VA0024121	The Madeira School (Difficult Run, UT)
VA0090093	John Marshall III Site (Old Courthouse Spring Branch)
VAG250102	The Peterson Companies (Scotts Run, UT)
VAG750193	Avis Rent a Car (Scotts Run, UT)
VAG830194	Texaco – Vienna Food Mart (Piney Branch)
VAG830246	Vienna 226 Maple Venture LLC (Piney Branch)
VAG830381	Reston Community Center (Snakeden Branch)

MEMORANDUM

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

13901 Crown Court Woodbridge, VA 22193

SUBJECT: Reissuance Site Visit
Reston Lake Anne Air Conditioning (VA0091995)

TO: Permit Reissuance File

FROM: Susan Mackert

DATE: October 17, 2011

COPIES:

A site visit was performed on October 13, 2011, to verify information provided in the facility's permit reapplication package. Information provided in the reapplication package was found representative of actual site conditions.

Reston Lake Anne Air Conditioning (RELAC) is a privately owned utility that provides central air conditioning to ten properties comprised of approximately 2,000 customers surrounding Lake Anne in the City of Reston. The system is operational from May to October. During peak summer demand, flows can reach up to 3.5 MGD while during winter months there is no discharge.

Water is withdrawn from Lake Anne (a 25 acre storm water retention pond – photo 1) at its highest point and is passed through intake screens to remove debris (photo 2). Debris is removed manually from the screens on a daily basis and is placed on shore to serve as mulch and is not returned to the lake. Additionally, water is passed through 20 strainers within the "plant" prior to being pumped through the system. The strainers are manually cleaned on a daily basis. After passing through the strainers, water is then pumped by one of four Worthington 40 hp pumps to one of four 400 ton Carrier chillers each with a design flow of 1200 gpm (photo 3). Two chillers are used at a time to provide chilled water which runs through approximately 18 miles of underground pipe to each home within the community. The chillers are cleaned once per month with a wire brush and without the use of chemicals.

When lake levels fall below six feet, the system must shut down or operators must attempt to secure the release of water from upstream lakes. At no time is water pulled from a chlorinated city source.

Discharge from the facility is comprised solely of once through non-contact cooling water. At this time, all discharge from the facility is discharged through a single outfall (001) back to Lake Anne downstream of the intake. The discharge point is located along the main portion of the lake approximately three feet under the water (photo 4). DEQ staff expressed concerns to Aqua Virginia representatives about the comingled nature of compliance samples; that is the non-contact cooling water discharge from the system and lake water. Aqua Virginia staff indicated a discrete sampling location could not be utilized.

Photo 1. Lake Anne.

Photo 2. Intake area.

Photo 3. Chillers.

Photo 4. Submerged discharge location to Lake Anne.

To:	Susan Mackert
From:	Katie Conaway
Date:	August 30, 2011
Subject:	Planning Statement for Reston Lake Anne Air Conditioning (RELAC)
Permit Number:	VA0091995

Discharge Type:	Industrial (non-contact cooling water)
Discharge Flow:	2.6 MGD (discharge only occurs from May – October depending on outdoor temperatures)
Receiving Stream:	Lake Anne
Latitude / Longitude:	38°57'54" / -77°20'15"
Streamcode:	1aXJJ
Waterbody:	VAN-A11L
Water Quality Standards:	Class III, Section 9.
Rivermile:	0.78
Drainage Area:	0.83 mi^2

1. Is there monitoring data for the receiving stream?

No.

- If yes, please attach latest summary.
- If no, where is the nearest downstream monitoring station.

This facility discharges to Lake Anne. Lake Anna flows into an Unnamed Tributary to Colvin Run, which in turns flows into Colvin Run. There is limited citizen monitoring data for the Unnamed Tributary to Colvin Run (XJJ). The nearest downstream DEQ monitoring station with ambient data is Station 1aCOV000.22, located on Colvin Run at the Carper Farm Way bridge crossing. This station is located approximately 2.73 rivermiles downstream from the Outfall of VA0091995. The following two monitoring summaries (as taken from the 2010 Integrated Assessment) are found below: 1) monitoring summary for the Unnamed Tributary to Colvin Run; and 2) monitoring for Station 1aCOV000.22:

Unnamed Tributary to Colvin Run (XJJ):

Class III, Section 9.

Citizen monitoring station 1aXJJ-DR20-SOS.

The data collected by the citizen monitoring group indicate that a water quality issue may exist; however, the methodology and/or data quality has not been approved for such a determination. Citizen monitoring finds a high probability of adverse conditions for biota, resulting in an observed effect for the aquatic life use.

The fish consumption, recreation, and wildlife uses were not assessed.

Colvin Run:

Class III, Section 8, special stds. PWS.

DEQ ambient water quality monitoring station 1aCOV000.22, at Carper Farm Way. Citizen monitoring stations 1aCOV-DR13-SOS.

The data collected by the citizen monitoring group indicate that the aquatic life use is being attained; however, the methodology and/or data quality has not been approved for such a determination. Citizen monitoring finds a low probability of adverse conditions for biota. The wildlife use is considered fully supporting. The fish consumption, public water supply, and recreation uses were not assessed.

2. Is the receiving stream on the current 303(d) list?

No.

- If yes, what is the impairment?

N/A

- Has the TMDL been prepared?

N/A

- If yes, what is the WLA for the discharge?

N/A

- If no, what is the schedule for the TMDL?

N/A

3. If the answer to (2) above is no, is there a downstream 303(d) listed impairment?

Yes. Lake Anne flows into a Unnamed Tributary to Colvin Run (XJJ), which in turn flows into Colvin Run, and then into Difficult Run. Difficult Run is listed with several downstream impairments.

- If yes, what is the impairment?

Recreational Use Impairment: Sufficient excursions from the maximum *E. coli* bacteria criterion (5 of 21 samples - 23.8%) were recorded at DEQ's ambient water quality monitoring station (1aDIF000.86) at the Route 193 crossing to assess this stream segment as not supporting the recreation use goal for the 2010 water quality assessment.

Aquatic Life Use Impairment: Two biological monitoring events in 2005, one of two biological monitoring events in 2006 and two biological monitoring events in 2007, at station 1aDIF000.86 resulted in a VSCI score which indicates an impaired macroinvertebrate community, as does the mean score of these six samples. Additionally, two biological monitoring events in 2007 at station 1aDIF000.80 resulted in a VSCI score which indicates an impaired macroinvertebrate community.

Fish Consumption Use Impairment: Heptachlor Epoxide. Excursions above of the water quality criterion based tissue screening value (TV) of 12 parts per billion (ppb) for heptachlor epoxide in fish tissue were recorded in one specie of fish samples (2 total samples); American eel (2001) and American eel (2004), collected at monitoring station 1aDIF000.86.

Fish Consumption Use Impairment: PCBs. The fish consumption use is categorized as impaired due to a Virginia Department of Health, Division of Health Hazards Control, PCB fish consumption advisory. The advisory, dated 12/13/04, limits American eel consumption to no more than two meals per month. The affected area includes the following tributaries between the Virginia/Maryland state line near the Route 340 bridge (Loudoun County) to the I-395 bridge in Arlington County (above the Woodrow Wilson Bridge): Goose Creek up to the Dulles Greenway Road Bridge, Broad Run up to the Route 625 bridge, Difficult Run up to the Route 7 bridge, and Pimmit Run up to the Route 309 bridge.

- Has a TMDL been prepared?

  Recreational Use Impairment: Yes. TMDL Approved by EPA on 11/07/2008
  Aquatic Life Use Impairment: Yes. TMDL Approved by EPA on 11/07/2008
  Fish Consumption Use Impairment for Heptachlor Epoxide: No.
  Fish Consumption Use Impairment for PCBs: No.

- Will the TMDL include the receiving stream?

  The TMDLs will not/do not specifically include the receiving stream; however, all upstream point source dischargers are considered in TMDL development.

- Is there a WLA for the discharge?

  Recreational Use Impairment TMDL – No.
  Aquatic Life Use Impairment TMDL – No.
  Fish Consumption Use Impairment for Heptachlor – N/A, TMDL not completed yet.
  Fish Consumption Use Impairment for PCBs – N/A, TMDL not completed yet.

- What is the schedule for the TMDL?

  Recreational Use Impairment: Yes. TMDL Approved by EPA on 11/07/2008
  Aquatic Life Use Impairment: Yes. TMDL Approved by EPA on 11/07/2008
  Fish Consumption Use Impairment for Heptachlor Epoxide: TMDL due 2018
  Fish Consumption Use Impairment for PCBs: TMDL Due 2018

4. Is there monitoring or other conditions that Planning/Assessment needs in the permit?

There is a completed downstream TMDL for the aquatic life use impairment for the Chesapeake Bay. However, the Bay TMDL and the WLAs contained within the TMDL are not addressed in this planning statement.

This facility is located upstream from Difficult Run, which has a PCB impairment (TMDL due by 2018). According to PCB Point Source Monitoring Guidance (TMDL Guidance Memo No. 09-2001) this facility is a candidate for low-level PCB monitoring. However, since the discharge from this facility is non-contact cooling

water, the Assessment/TMDL Staff has concluded that low-level PCB monitoring is not warranted for this facility.

5. Fact Sheet Requirements – Please provide information on other VPDES permits or VADEQ monitoring stations located within a 2 mile radius of the facility. In addition, please provide information on any drinking water intakes located within a 5 mile radius of the facility.

There are no VPDES individual permits within a 2 mile radius of this facility. There is one DEQ monitoring station within a 2 mile radius of this facility:

1aCOV003.32: Colvin Run at the Wiehle Avenue (Route 828) Bridge Crossing.

There are no drinking water intakes within a 5 mile radius of the facility.

FRESHWATER
WATER QUALITY CRITERIA / WASTELOAD ALLOCATION ANALYSIS

Facility Name: Reston Lake Anne Air Conditioning Permit No.: VA0091995

Receiving Stream: Lake Anne Version: OWP Guidance Memo 00-2011 (8/24/00)

Stream Information

Mean Hardness (as CaCO3) =		mg/L
90% Temperature (Annual) =		deg C
90% Temperature (Wet season) =		deg C
90% Maximum pH =		SU
10% Maximum pH =		SU
Tier Designation (1 or 2) =	1	
Public Water Supply (PWS) Y/N? =	n	
Trout Present Y/N? =	n	
Early Life Stages Present Y/N? =	y	

Stream Flows

1Q10 (Annual) =	0	MGD
7Q10 (Annual) =	0	MGD
30Q10 (Annual) =	0	MGD
1Q10 (Wet season) =	0	MGD
30Q10 (Wet season)	0	MGD
30Q5 =	0	MGD
Harmonic Mean =	0	MGD

Mixing Information

Annual - 1Q10 Mix =	100	%
- 7Q10 Mix =	100	%
- 30Q10 Mix =	100	%
Wet Season - 1Q10 Mix =	100	%
- 30Q10 Mix =	100	%

Effluent Information

Mean Hardness (as CaCO3) =	52	mg/L
90% Temp (Annual) =	31	deg C
90% Temp (Wet season) =		deg C
90% Maximum pH =	7.6	SU
10% Maximum pH =		SU
Discharge Flow =	2.6	MGD

Parameter	Background	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				**Most Limiting Allocations**			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	**Acute**	**Chronic**	**HH (PWS)**	**HH**
Acenapthene	5	--	--	na	9.9E+02	--	--	na	9.9E+02	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**9.9E+02**
Acrolein	0	--	--	na	9.3E+00	--	--	na	9.3E+00	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**9.3E+00**
Acrylonitrile[C]	0	--	--	na	2.5E+00	--	--	na	2.5E+00	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**2.5E+00**
Aldrin [C]	0	3.0E+00	--	na	5.0E-04	3.0E+00	--	na	5.0E-04	--	--	--	--	--	--	--	--	**3.0E+00**	**--**	**na**	**5.0E-04**
Ammonia-N (mg/l) (Yearly)	0	1.70E+01	1.37E+00	na	--	1.70E+01	1.37E+00	na	--	--	--	--	--	--	--	--	--	**1.70E+01**	**1.37E+00**	**na**	**--**
Ammonia-N (mg/l) (High Flow)	0	1.70E+01	3.98E+00	na	--	1.70E+01	3.98E+00	na	--	--	--	--	--	--	--	--	--	**1.70E+01**	**3.98E+00**	**na**	**--**
Anthracene	0	--	--	na	4.0E+04	--	--	na	4.0E+04	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**4.0E+04**
Antimony	0	--	--	na	6.4E+02	--	--	na	6.4E+02	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**6.4E+02**
Arsenic	0	3.4E+02	1.5E+02	na	--	3.4E+02	1.5E+02	na	--	--	--	--	--	--	--	--	--	**3.4E+02**	**1.5E+02**	**na**	**--**
Barium	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Benzene [C]	0	--	--	na	5.1E+02	--	--	na	5.1E+02	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**5.1E+02**
Benzidine[C]	0	--	--	na	2.0E-03	--	--	na	2.0E-03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**2.0E-03**
Benzo (a) anthracene[C]	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.8E-01**
Benzo (b) fluoranthene[C]	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.8E-01**
Benzo (k) fluoranthene[C]	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.8E-01**
Benzo (a) pyrene[C]	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.8E-01**
Bis2-Chloroethyl Ether[C]	0	--	--	na	5.3E+00	--	--	na	5.3E+00	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**5.3E+00**
Bis2-Chloroisopropyl Ether	0	--	--	na	6.5E+04	--	--	na	6.5E+04	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**6.5E+04**
Bis 2-Ethylhexyl Phthalate[C]	0	--	--	na	2.2E+01	--	--	na	2.2E+01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**2.2E+01**
Bromoform [C]	0	--	--	na	1.4E+03	--	--	na	1.4E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.4E+03**
Butylbenzylphthalate	0	--	--	na	1.9E+03	--	--	na	1.9E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.9E+03**
Cadmium	0	1.9E+00	6.8E-01	na	--	1.9E+00	6.8E-01	na	--	--	--	--	--	--	--	--	--	**1.9E+00**	**6.8E-01**	**na**	**--**
Carbon Tetrachloride[C]	0	--	--	na	1.6E+01	--	--	na	1.6E+01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.6E+01**
Chlordane[C]	0	2.4E+00	4.3E-03	na	8.1E-03	2.4E+00	4.3E-03	na	8.1E-03	--	--	--	--	--	--	--	--	**2.4E+00**	**4.3E-03**	**na**	**8.1E-03**
Chloride	0	8.6E+05	2.3E+05	na	--	8.6E+05	2.3E+05	na	--	--	--	--	--	--	--	--	--	**8.6E+05**	**2.3E+05**	**na**	**--**
TRC	0	1.9E+01	1.1E+01	na	--	1.9E+01	1.1E+01	na	--	--	--	--	--	--	--	--	--	**1.9E+01**	**1.1E+01**	**na**	**--**
Chlorobenzene	0	--	--	na	1.6E+03	--	--	na	1.6E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.6E+03**

Parameter	Background	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Chlorodibromomethane[C]	0	--	--	na	1.3E+02	--	--	na	1.3E+02	--	--	--	--	--	--	--	--	--	--	na	1.3E+02
Chloroform	0	--	--	na	1.1E+04	--	--	na	1.1E+04	--	--	--	--	--	--	--	--	--	--	na	1.1E+04
2-Chloronaphthalene	0	--	--	na	1.6E+03	--	--	na	1.6E+03	--	--	--	--	--	--	--	--	--	--	na	1.6E+03
2-Chlorophenol	0	--	--	na	1.5E+02	--	--	na	1.5E+02	--	--	--	--	--	--	--	--	--	--	na	1.5E+02
Chlorpyrifos	0	8.3E-02	4.1E-02	na	--	8.3E-02	4.1E-02	na	--	--	--	--	--	--	--	--	--	8.3E-02	4.1E-02	na	--
Chromium III	0	3.3E+02	4.3E+01	na	--	3.3E+02	4.3E+01	na	--	--	--	--	--	--	--	--	--	3.3E+02	4.3E+01	na	--
Chromium VI	0	1.6E+01	1.1E+01	na	--	1.6E+01	1.1E+01	na	--	--	--	--	--	--	--	--	--	1.6E+01	1.1E+01	na	--
Chromium, Total	0	--	--	1.0E+02	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Chrysene[C]	0	--	--	na	1.8E-02	--	--	na	1.8E-02	--	--	--	--	--	--	--	--	--	--	na	1.8E-02
Copper	0	7.3E+00	5.1E+00	na	--	7.3E+00	5.1E+00	na	--	--	--	--	--	--	--	--	--	7.3E+00	5.1E+00	na	--
Cyanide, Free	0	2.2E+01	5.2E+00	na	1.6E+04	2.2E+01	5.2E+00	na	1.6E+04	--	--	--	--	--	--	--	--	2.2E+01	5.2E+00	na	1.6E+04
DDD[C]	0	--	--	na	3.1E-03	--	--	na	3.1E-03	--	--	--	--	--	--	--	--	--	--	na	3.1E-03
DDE[C]	0	--	--	na	2.2E-03	--	--	na	2.2E-03	--	--	--	--	--	--	--	--	--	--	na	2.2E-03
DDT[C]	0	1.1E+00	1.0E-03	na	2.2E-03	1.1E+00	1.0E-03	na	2.2E-03	--	--	--	--	--	--	--	--	1.1E+00	1.0E-03	na	2.2E-03
Demeton	0	--	1.0E-01	na	--	--	1.0E-01	na	--	--	--	--	--	--	--	--	--	--	1.0E-01	na	--
Diazinon	0	1.7E-01	1.7E-01	na	--	1.7E-01	1.7E-01	na	--	--	--	--	--	--	--	--	--	1.7E-01	1.7E-01	na	--
Dibenz(a,h)anthracene[C]	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	--	--	na	1.8E-01
1,2-Dichlorobenzene	0	--	--	na	1.3E+03	--	--	na	1.3E+03	--	--	--	--	--	--	--	--	--	--	na	1.3E+03
1,3-Dichlorobenzene	0	--	--	na	9.6E+02	--	--	na	9.6E+02	--	--	--	--	--	--	--	--	--	--	na	9.6E+02
1,4-Dichlorobenzene	0	--	--	na	1.9E+02	--	--	na	1.9E+02	--	--	--	--	--	--	--	--	--	--	na	1.9E+02
3,3-Dichlorobenzidine[C]	0	--	--	na	2.8E-01	--	--	na	2.8E-01	--	--	--	--	--	--	--	--	--	--	na	2.8E-01
Dichlorobromomethane[C]	0	--	--	na	1.7E+02	--	--	na	1.7E+02	--	--	--	--	--	--	--	--	--	--	na	1.7E+02
1,2-Dichloroethane[C]	0	--	--	na	3.7E+02	--	--	na	3.7E+02	--	--	--	--	--	--	--	--	--	--	na	3.7E+02
1,1-Dichloroethylene	0	--	--	na	7.1E+03	--	--	na	7.1E+03	--	--	--	--	--	--	--	--	--	--	na	7.1E+03
1,2-trans-dichloroethylene	0	--	--	na	1.0E+04	--	--	na	1.0E+04	--	--	--	--	--	--	--	--	--	--	na	1.0E+04
2,4-Dichlorophenol	0	--	--	na	2.9E+02	--	--	na	2.9E+02	--	--	--	--	--	--	--	--	--	--	na	2.9E+02
2,4-Dichlorophenoxy acetic acid (2,4-D)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
1,2-Dichloropropane[C]	0	--	--	na	1.5E+02	--	--	na	1.5E+02	--	--	--	--	--	--	--	--	--	--	na	1.5E+02
1,3-Dichloropropene[C]	0	--	--	na	2.1E+02	--	--	na	2.1E+02	--	--	--	--	--	--	--	--	--	--	na	2.1E+02
Dieldrin[C]	0	2.4E-01	5.6E-02	na	5.4E-04	2.4E-01	5.6E-02	na	5.4E-04	--	--	--	--	--	--	--	--	2.4E-01	5.6E-02	na	5.4E-04
Diethyl Phthalate	0	--	--	na	4.4E+04	--	--	na	4.4E+04	--	--	--	--	--	--	--	--	--	--	na	4.4E+04
2,4-Dimethylphenol	0	--	--	na	8.5E+02	--	--	na	8.5E+02	--	--	--	--	--	--	--	--	--	--	na	8.5E+02
Dimethyl Phthalate	0	--	--	na	1.1E+06	--	--	na	1.1E+06	--	--	--	--	--	--	--	--	--	--	na	1.1E+06
Di-n-Butyl Phthalate	0	--	--	na	4.5E+03	--	--	na	4.5E+03	--	--	--	--	--	--	--	--	--	--	na	4.5E+03
2,4 Dinitrophenol	0	--	--	na	5.3E+03	--	--	na	5.3E+03	--	--	--	--	--	--	--	--	--	--	na	5.3E+03
2-Methyl-4,6-Dinitrophenol	0	--	--	na	2.8E+02	--	--	na	2.8E+02	--	--	--	--	--	--	--	--	--	--	na	2.8E+02
2,4-Dinitrotoluene[C]	0	--	--	na	3.4E+01	--	--	na	3.4E+01	--	--	--	--	--	--	--	--	--	--	na	3.4E+01
Dioxin 2,3,7,8-tetrachlorodibenzo-p-dioxin	0	--	--	na	5.1E-08	--	--	na	5.1E-08	--	--	--	--	--	--	--	--	--	--	na	5.1E-08
1,2-Diphenylhydrazine[C]	0	--	--	na	2.0E+00	--	--	na	2.0E+00	--	--	--	--	--	--	--	--	--	--	na	2.0E+00
Alpha-Endosulfan	0	2.2E-01	5.6E-02	na	8.9E+01	2.2E-01	5.6E-02	na	8.9E+01	--	--	--	--	--	--	--	--	2.2E-01	5.6E-02	na	8.9E+01
Beta-Endosulfan	0	2.2E-01	5.6E-02	na	8.9E+01	2.2E-01	5.6E-02	na	8.9E+01	--	--	--	--	--	--	--	--	2.2E-01	5.6E-02	na	8.9E+01
Alpha + Beta Endosulfan	0	2.2E-01	5.6E-02	--	--	2.2E-01	5.6E-02	--	--	--	--	--	--	--	--	--	--	2.2E-01	5.6E-02	--	--
Endosulfan Sulfate	0	--	--	na	8.9E+01	--	--	na	8.9E+01	--	--	--	--	--	--	--	--	--	--	na	8.9E+01
Endrin	0	8.6E-02	3.6E-02	na	6.0E-02	8.6E-02	3.6E-02	na	6.0E-02	--	--	--	--	--	--	--	--	8.6E-02	3.6E-02	na	6.0E-02
Endrin Aldehyde	0	--	--	na	3.0E-01	--	--	na	3.0E-01	--	--	--	--	--	--	--	--	--	--	na	3.0E-01

Parameter	Background	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				**Most Limiting Allocations**			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	**Acute**	**Chronic**	**HH (PWS)**	**HH**
Ethylbenzene	0	--	--	na	2.1E+03	--	--	na	2.1E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**2.1E+03**
Fluoranthene	0	--	--	na	1.4E+02	--	--	na	1.4E+02	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.4E+02**
Fluorene	0	--	--	na	5.3E+03	--	--	na	5.3E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**5.3E+03**
Foaming Agents	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Guthion	0	--	1.0E-02	na	--	--	1.0E-02	na	--	--	--	--	--	--	--	--	--	**--**	**1.0E-02**	**na**	**--**
Heptachlor[C]	0	5.2E-01	3.8E-03	na	7.9E-04	5.2E-01	3.8E-03	na	7.9E-04	--	--	--	--	--	--	--	--	**5.2E-01**	**3.8E-03**	**na**	**7.9E-04**
Heptachlor Epoxide[C]	0	5.2E-01	3.8E-03	na	3.9E-04	5.2E-01	3.8E-03	na	3.9E-04	--	--	--	--	--	--	--	--	**5.2E-01**	**3.8E-03**	**na**	**3.9E-04**
Hexachlorobenzene[C]	0	--	--	na	2.9E-03	--	--	na	2.9E-03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**2.9E-03**
Hexachlorobutadiene[C]	0	--	--	na	1.8E+02	--	--	na	1.8E+02	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.8E+02**
Hexachlorocyclohexane Alpha-BHC[C]	0	--	--	na	4.9E-02	--	--	na	4.9E-02	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**4.9E-02**
Hexachlorocyclohexane Beta-BHC[C]	0	--	--	na	1.7E-01	--	--	na	1.7E-01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.7E-01**
Hexachlorocyclohexane Gamma-BHC[C] (Lindane)	0	9.5E-01	na	na	1.8E+00	9.5E-01	--	na	1.8E+00	--	--	--	--	--	--	--	--	**9.5E-01**	**--**	**na**	**1.8E+00**
Hexachlorocyclopentadiene	0	--	--	na	1.1E+03	--	--	na	1.1E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.1E+03**
Hexachloroethane[C]	0	--	--	na	3.3E+01	--	--	na	3.3E+01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**3.3E+01**
Hydrogen Sulfide	0	--	2.0E+00	na	--	--	2.0E+00	na	--	--	--	--	--	--	--	--	--	**--**	**2.0E+00**	**na**	**--**
Indeno (1,2,3-cd) pyrene[C]	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.8E-01**
Iron	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Isophorone[C]	0	--	--	na	9.6E+03	--	--	na	9.6E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**9.6E+03**
Kepone	0	--	0.0E+00	na	--	--	0.0E+00	na	--	--	--	--	--	--	--	--	--	**--**	**0.0E+00**	**na**	**--**
Lead	0	5.2E+01	5.9E+00	na	--	5.2E+01	5.9E+00	na	--	--	--	--	--	--	--	--	--	**5.2E+01**	**5.9E+00**	**na**	**--**
Malathion	0	--	1.0E-01	na	--	--	1.0E-01	na	--	--	--	--	--	--	--	--	--	**--**	**1.0E-01**	**na**	**--**
Manganese	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Mercury	0	1.4E+00	7.7E-01	--	--	1.4E+00	7.7E-01	--	--	--	--	--	--	--	--	--	--	**1.4E+00**	**7.7E-01**	**--**	**--**
Methyl Bromide	0	--	--	na	1.5E+03	--	--	na	1.5E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.5E+03**
Methylene Chloride[C]	0	--	--	na	5.9E+03	--	--	na	5.9E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**5.9E+03**
Methoxychlor	0	--	3.0E-02	na	--	--	3.0E-02	na	--	--	--	--	--	--	--	--	--	**--**	**3.0E-02**	**na**	**--**
Mirex	0	--	0.0E+00	na	--	--	0.0E+00	na	--	--	--	--	--	--	--	--	--	**--**	**0.0E+00**	**na**	**--**
Nickel	0	1.0E+02	1.2E+01	na	4.6E+03	1.0E+02	1.2E+01	na	4.6E+03	--	--	--	--	--	--	--	--	**1.0E+02**	**1.2E+01**	**na**	**4.6E+03**
Nitrate (as N)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Nitrobenzene	0	--	--	na	6.9E+02	--	--	na	6.9E+02	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**6.9E+02**
N-Nitrosodimethylamine[C]	0	--	--	na	3.0E+01	--	--	na	3.0E+01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**3.0E+01**
N-Nitrosodiphenylamine[C]	0	--	--	na	6.0E+01	--	--	na	6.0E+01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**6.0E+01**
N-Nitrosodi-n-propylamine[C]	0	--	--	na	5.1E+00	--	--	na	5.1E+00	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**5.1E+00**
Nonylphenol	0	2.8E+01	6.6E+00	--	--	2.8E+01	6.6E+00	na	--	--	--	--	--	--	--	--	--	**2.8E+01**	**6.6E+00**	**na**	**--**
Parathion	0	6.5E-02	1.3E-02	na	--	6.5E-02	1.3E-02	na	--	--	--	--	--	--	--	--	--	**6.5E-02**	**1.3E-02**	**na**	**--**
PCB Total[C]	0	--	1.4E-02	na	6.4E-04	--	1.4E-02	na	6.4E-04	--	--	--	--	--	--	--	--	**--**	**1.4E-02**	**na**	**6.4E-04**
Pentachlorophenol[C]	0	7.7E-03	5.9E-03	na	3.0E+01	7.7E-03	5.9E-03	na	3.0E+01	--	--	--	--	--	--	--	--	**7.7E-03**	**5.9E-03**	**na**	**3.0E+01**
Phenol	0	--	--	na	8.6E+05	--	--	na	8.6E+05	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**8.6E+05**
Pyrene	0	--	--	na	4.0E+03	--	--	na	4.0E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**4.0E+03**
Radionuclides	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Gross Alpha Activity (pCi/L)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Beta and Photon Activity (mrem/yr)	0	--	--	na	4.0E+00	--	--	na	4.0E+00	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**4.0E+00**
Radium 226 + 228 (pCi/L)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Uranium (ug/l)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**

Parameter	Background	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				**Most Limiting Allocations**			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	**Acute**	**Chronic**	**HH (PWS)**	**HH**
Selenium, Total Recoverable	0	2.0E+01	5.0E+00	na	4.2E+03	2.0E+01	5.0E+00	na	4.2E+03	--	--	--	--	--	--	--	--	**2.0E+01**	**5.0E+00**	**na**	**4.2E+03**
Silver	0	1.1E+00	--	na	--	1.1E+00	--	na	--	--	--	--	--	--	--	--	--	**1.1E+00**	**--**	**na**	**--**
Sulfate	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
1,1,2,2-Tetrachloroethane[C]	0	--	--	na	4.0E+01	--	--	na	4.0E+01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**4.0E+01**
Tetrachloroethylene[C]	0	--	--	na	3.3E+01	--	--	na	3.3E+01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**3.3E+01**
Thallium	0	--	--	na	4.7E-01	--	--	na	4.7E-01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**4.7E-01**
Toluene	0	--	--	na	6.0E+03	--	--	na	6.0E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**6.0E+03**
Total dissolved solids	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Toxaphene[C]	0	7.3E-01	2.0E-04	na	2.8E-03	7.3E-01	2.0E-04	na	2.8E-03	--	--	--	--	--	--	--	--	**7.3E-01**	**2.0E-04**	**na**	**2.8E-03**
Tributyltin	0	4.6E-01	7.2E-02	na	--	4.6E-01	7.2E-02	na	--	--	--	--	--	--	--	--	--	**4.6E-01**	**7.2E-02**	**na**	**--**
1,2,4-Trichlorobenzene	0	--	--	na	7.0E+01	--	--	na	7.0E+01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**7.0E+01**
1,1,2-Trichloroethane[C]	0	--	--	na	1.6E+02	--	--	na	1.6E+02	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.6E+02**
Trichloroethylene[C]	0	--	--	na	3.0E+02	--	--	na	3.0E+02	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**3.0E+02**
2,4,6-Trichlorophenol[C]	0	--	--	na	2.4E+01	--	--	na	2.4E+01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**2.4E+01**
2-(2,4,5-Trichlorophenoxy) propionic acid (Silvex)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Vinyl Chloride[C]	0	--	--	na	2.4E+01	--	--	na	2.4E+01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**2.4E+01**
Zinc	0	6.7E+01	6.8E+01	na	2.6E+04	6.7E+01	6.8E+01	na	2.6E+04	--	--	--	--	--	--	--	--	**6.7E+01**	**6.8E+01**	**na**	**2.6E+04**

Notes:

1. All concentrations expressed as micrograms/liter (ug/l), unless noted otherwise
2. Discharge flow is highest monthly average or Form 2C maximum for Industries and design flow for Municipals
3. Metals measured as Dissolved, unless specified otherwise
4. "C" indicates a carcinogenic parameter
5. Regular WLAs are mass balances (minus background concentration) using the % of stream flow entered above under Mixing Information.
   Antidegradation WLAs are based upon a complete mix.
6. Antideg. Baseline = (0.25(WQC - background conc.) + background conc.) for acute and chronic
   = (0.1(WQC - background conc.) + background conc.) for human health
7. WLAs established at the following stream flows: 1Q10 for Acute, 30Q10 for Chronic Ammonia, 7Q10 for Other Chronic, 30Q5 for Non-carcinogens and Harmonic Mean for Carcinogens. To apply mixing ratios from a model set the stream flow equal to (mixing ratio - 1), effluent flow equal to 1 and 100% mix.

Metal	Target Value (SSTV)
Antimony	6.4E+02
Arsenic	9.0E+01
Barium	na
Cadmium	4.1E-01
Chromium III	2.6E+01
Chromium VI	6.4E+00
Copper	2.9E+00
Iron	na
Lead	3.5E+00
Manganese	na
Mercury	4.6E-01
Nickel	7.0E+00
Selenium	3.0E+00
Silver	4.5E-01
Zinc	2.7E+01

Note: do not use QL's lower than the minimum QL's provided in agency guidance

DMR QA/QC

Permit #:VA0091995 Facility:Reston Lake Anne Air Conditioning Corp

Due	Outfall	Parameter Description	CONC MIN	Lim Min	CONC MAX	Lim Max
10-Jul-07	001	PH	7.8	6.0	7.8	9.0
10-Oct-07	001	PH	7.04	6.0	7.04	9.0
10-Jan-08	001	PH	7.3	6.0	7.3	9.0
10-Apr-08	001	PH	NULL	6.0	NULL	9.0
10-Jul-08	001	PH	6.74	6.0	6.74	9.0
10-Oct-08	001	PH	7.6	6.0	7.6	9.0
10-Jan-09	001	PH	7.6	6.0	7.6	9.0
10-Apr-09	001	PH	NULL	6.0	NULL	9.0
10-Jul-09	001	PH	7.2	6.0	7.2	9.0
10-Oct-09	001	PH	6.8	6.0	6.8	9.0
10-Jan-10	001	PH	7.3	6.0	7.3	9.0
10-Apr-10	001	PH	NULL	6.0	NULL	9.0
10-Jul-10	001	PH	6.8	6.0	6.8	9.0
10-Oct-10	001	PH	7.1	6.0	7.1	9.0
10-Jan-11	001	PH	7.1	6.0	7.1	9.0
10-Apr-11	001	PH	NULL	6.0	NULL	9.0
10-Jul-11	001	PH	7.5	6.0	7.5	9.0

90% pH = 7.6 S.U.

DMR QA/QC

Permit #:VA0091995 Facility:Reston Lake Anne Air Conditioning Corp

Due	Outfall	Parameter Description	CONC AVG	Lim Avg	CONC MAX	Lim Max
10-Jul-07	001	HARDNESS, TOTAL (AS CACO3)	40	NL	40	NL
10-Oct-07	001	HARDNESS, TOTAL (AS CACO3)	58	NL	58	NL
10-Jan-08	001	HARDNESS, TOTAL (AS CACO3)	40	NL	40	NL
10-Apr-08	001	HARDNESS, TOTAL (AS CACO3)	NULL	NL	NULL	NL
10-Jul-08	001	HARDNESS, TOTAL (AS CACO3)	30	NL	30	NL
10-Oct-08	001	HARDNESS, TOTAL (AS CACO3)	24.0	NL	24.0	NL
10-Jan-09	001	HARDNESS, TOTAL (AS CACO3)	23	NL	23	NL
10-Apr-09	001	HARDNESS, TOTAL (AS CACO3)	NULL	NL	NULL	NL
10-Jul-09	001	HARDNESS, TOTAL (AS CACO3)	50	NL	50	NL
10-Oct-09	001	HARDNESS, TOTAL (AS CACO3)	78	NL	78	NL
10-Jan-10	001	HARDNESS, TOTAL (AS CACO3)	40	NL	40	NL
10-Apr-10	001	HARDNESS, TOTAL (AS CACO3)	NULL	NL	NULL	NL
10-Jul-10	001	HARDNESS, TOTAL (AS CACO3)	80	NL	80	NL
10-Oct-10	001	HARDNESS, TOTAL (AS CACO3)	68	NL	68	NL
10-Jan-11	001	HARDNESS, TOTAL (AS CACO3)	110	NL	110	NL
10-Apr-11	001	HARDNESS, TOTAL (AS CACO3)	NULL	NL	NULL	NL
10-Jul-11	001	HARDNESS, TOTAL (AS CACO3)	35	NL	35	NL

Average Hardness (as $CaCO_3$) = 52 mg/L

DMR QA/QC

Permit #:VA0091995 Facility:Reston Lake Anne Air Conditioning Corp

Due	Outfall	Parameter Description	CONC MAX	Lim Max
10-Jul-07	001	TEMPERATURE, WATER (DEG. C)	26.6	32
10-Oct-07	001	TEMPERATURE, WATER (DEG. C)	26.3	32
10-Jan-08	001	TEMPERATURE, WATER (DEG. C)	23.8	32
10-Apr-08	001	TEMPERATURE, WATER (DEG. C)	NULL	32
10-Jul-08	001	TEMPERATURE, WATER (DEG. C)	31	32
10-Oct-08	001	TEMPERATURE, WATER (DEG. C)	22	32
10-Jan-09	001	TEMPERATURE, WATER (DEG. C)	31	32
10-Apr-09	001	TEMPERATURE, WATER (DEG. C)	NULL	32
10-Jul-09	001	TEMPERATURE, WATER (DEG. C)	29.4	32
10-Oct-09	001	TEMPERATURE, WATER (DEG. C)	25.5	32
10-Jan-10	001	TEMPERATURE, WATER (DEG. C)	18	32
10-Apr-10	001	TEMPERATURE, WATER (DEG. C)	NULL	32
10-Jul-10	001	TEMPERATURE, WATER (DEG. C)	26	32
10-Oct-10	001	TEMPERATURE, WATER (DEG. C)	24	32
10-Jan-11	001	TEMPERATURE, WATER (DEG. C)	18	32
10-Apr-11	001	TEMPERATURE, WATER (DEG. C)	NULL	32
10-Jul-11	001	TEMPERATURE, WATER (DEG. C)	26.2	32

90% Temperature = 31 (DEG. C)

DMR QA/QC

Permit #:VA0091995 Facility:Reston Lake Anne Air Conditioning Corp

Due	Outfall	Parameter Description	CONC AVG	Lim Avg	CONC MAX	Lim Max
10-Jul-07	001	COPPER, DISSOLVED (UG/L AS CU)	<20	NL	<20	NL
10-Oct-07	001	COPPER, DISSOLVED (UG/L AS CU)	8	NL	8	NL
10-Jan-08	001	COPPER, DISSOLVED (UG/L AS CU)	9	NL	9	NL
10-Apr-08	001	COPPER, DISSOLVED (UG/L AS CU)	NULL	NL	NULL	NL
10-Jul-08	001	COPPER, DISSOLVED (UG/L AS CU)	11	NL	11	NL
10-Oct-08	001	COPPER, DISSOLVED (UG/L AS CU)	72	NL	72	NL
10-Jan-09	001	COPPER, DISSOLVED (UG/L AS CU)	59	NL	59	NL
10-Apr-09	001	COPPER, DISSOLVED (UG/L AS CU)	NULL	NL	NULL	NL
10-Jul-09	001	COPPER, DISSOLVED (UG/L AS CU)	8.4	NL	8.4	NL
10-Oct-09	001	COPPER, DISSOLVED (UG/L AS CU)	6.3	NL	6.3	NL
10-Jan-10	001	COPPER, DISSOLVED (UG/L AS CU)	1	NL	1	NL
10-Apr-10	001	COPPER, DISSOLVED (UG/L AS CU)	NULL	NL	NULL	NL
10-Jul-10	001	COPPER, DISSOLVED (UG/L AS CU)	8.1	NL	8.1	NL
10-Oct-10	001	COPPER, DISSOLVED (UG/L AS CU)	2.8	NL	2.8	NL
10-Jan-11	001	COPPER, DISSOLVED (UG/L AS CU)	13	NL	13	NL
10-Apr-11	001	COPPER, DISSOLVED (UG/L AS CU)	NULL	NL	NULL	NL
10-Jul-11	001	COPPER, DISSOLVED (UG/L AS CU)	11	NL	11	NL

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Facility = RELAC
Chemical = Copper
Chronic averaging period = 4
WLAa = 7.3
WLAc = 5.1
Q.L. = 0.5
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 12
Expected Value = 18.3659
Variance = 909.502
C.V. = 1.642060
97th percentile daily values = 82.0678
97th percentile 4 day average = 54.7669
97th percentile 30 day average= 28.7228
< Q.L. = 0
Model used = lognormal

A limit is needed based on Acute Toxicity
Maximum Daily Limit = 7.3
Average Weekly limit = 7.3
Average Monthly LImit = 7.3

The data are:

8
9
11
72
59
8.4
6.3
1
8.1
2.8
13
11

DMR QA/QC

Permit #:VA0091995 Facility:Reston Lake Anne Air Conditioning Corp

Due	Outfall	Parameter Description	CONC AVG	Lim Avg	CONC MAX	Lim Max
10-Jul-07	001	ZINC, DISSOLVED (AS ZN) (UG/L)	7	NL	7	NL
10-Oct-07	001	ZINC, DISSOLVED (AS ZN) (UG/L)	<5	NL	<5	NL
10-Jan-08	001	ZINC, DISSOLVED (AS ZN) (UG/L)	10	NL	10	NL
10-Apr-08	001	ZINC, DISSOLVED (AS ZN) (UG/L)	NULL	NL	NULL	NL
10-Jul-08	001	ZINC, DISSOLVED (AS ZN) (UG/L)	<10	NL	<10	NL
10-Oct-08	001	ZINC, DISSOLVED (AS ZN) (UG/L)	30	NL	30	NL
10-Jan-09	001	ZINC, DISSOLVED (AS ZN) (UG/L)	10	NL	10	NL
10-Apr-09	001	ZINC, DISSOLVED (AS ZN) (UG/L)	NULL	NL	NULL	NL
10-Jul-09	001	ZINC, DISSOLVED (AS ZN) (UG/L)	0	NL	0	NL
10-Oct-09	001	ZINC, DISSOLVED (AS ZN) (UG/L)	<QL	NL	<QL	NL
10-Jan-10	001	ZINC, DISSOLVED (AS ZN) (UG/L)	5	NL	5	NL
10-Apr-10	001	ZINC, DISSOLVED (AS ZN) (UG/L)	NULL	NL	NULL	NL
10-Jul-10	001	ZINC, DISSOLVED (AS ZN) (UG/L)	5	NL	5	NL
10-Oct-10	001	ZINC, DISSOLVED (AS ZN) (UG/L)	1.1	NL	1.1	NL
10-Jan-11	001	ZINC, DISSOLVED (AS ZN) (UG/L)	17	NL	17	NL
10-Apr-11	001	ZINC, DISSOLVED (AS ZN) (UG/L)	NULL	NL	NULL	NL
10-Jul-11	001	ZINC, DISSOLVED (AS ZN) (UG/L)	5	NL	5	NL

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Facility = RELAC
Chemical = Zinc
Chronic averaging period = 4
WLAa = 67
WLAc = 68
Q.L. = 2.0
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 9
Expected Value = 4.60561
Variance = 7.63622
C.V. = 0.6
97th percentile daily values = 11.2073
97th percentile 4 day average = 7.66278
97th percentile 30 day average= 5.55462
< Q.L. = 1
Model used = BPJ Assumptions, Type 1 data

No Limit is required for this material

The data are:

7
10
30
10
5
5
1.1
17
15

Public Notice – Environmental Permit

PURPOSE OF NOTICE: To seek public comment on a draft permit from the Department of Environmental Quality that will allow the release of industrial wastewater into a water body in Fairfax County, Virginia.

PUBLIC COMMENT PERIOD: December 2, 2011 to 5:00 p.m. on January 2, 2012

PERMIT NAME: Virginia Pollutant Discharge Elimination System Permit – Industrial Wastewater issued by DEQ, under the authority of the State Water Control Board

APPLICANT NAME, ADDRESS AND PERMIT NUMBER: Aqua Virginia, 2414 Granite Ridge Road, Rockville, VA 23146, VA0091995

NAME AND ADDRESS OF FACILITY: Reston Lake Anne Air Conditioning Corp., 11485 Washington Plaza West, Reston, VA 20190

PROJECT DESCRIPTION: Aqua Virginia has applied for a reissuance of a permit for the private Reston Lake Anne Air Conditioning. The applicant proposes to release industrial wastewater at a maximum rate of 3.5 million gallons per day into a water body. The facility proposes to release the industrial wastewater in to Lake Anne in Fairfax County in the Potomac River watershed. A watershed is the land area drained by a river and its incoming streams. The permit will limit the following pollutants to amounts that protect water quality: pH, Temperature, and Total Recoverable Copper. The permit will also require monitoring for Hardness, Total Dissolved Zinc, and Total Phosphorus.

HOW TO COMMENT AND/OR REQUEST A PUBLIC HEARING: DEQ accepts comments and requests for public hearing by e-mail, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for public hearing must also include: 1) The reason why a public hearing is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requester, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. A public hearing may be held, including another comment period, if public response is significant, based on individual requests for a public hearing, and there are substantial, disputed issues relevant to the permit.

CONTACT FOR PUBLIC COMMENTS, DOCUMENT REQUESTS AND ADDITIONAL INFORMATION: The public may review the documents at the DEQ-Northern Regional Office by appointment, or may request electronic copies of the draft permit and fact sheet.
Name: Susan Mackert
Address: DEQ-Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193
Phone: (703) 583-3853 E-mail: susan.mackert@deq.virginia.gov Fax: (703) 583-3821

Revised 2/2003

State "Transmittal Checklist" to Assist in Targeting
Municipal and Industrial Individual NPDES Draft Permits for Review

Part I. State Draft Permit Submission Checklist

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Facility Name:	Reston Lake Anne Air Conditioning Corp.
NPDES Permit Number:	VA0091995
Permit Writer Name:	Susan Mackert
Date:	September 28, 2011

Major [ ] **Minor [x]** **Industrial [x]** **Municipal [ ]**

I.A. Draft Permit Package Submittal Includes:	**Yes**	**No**	**N/A**
1. Permit Application?	X		
2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)?	X		
3. Copy of Public Notice?	X		
4. Complete Fact Sheet?	X		
5. A Priority Pollutant Screening to determine parameters of concern?	X		
6. A Reasonable Potential analysis showing calculated WQBELs?	X		
7. Dissolved Oxygen calculations?			X
8. Whole Effluent Toxicity Test summary and analysis?		X	
9. Permit Rating Sheet for new or modified industrial facilities?	X		

I.B. Permit/Facility Characteristics	**Yes**	**No**	**N/A**
1. Is this a new, or currently unpermitted facility?		X	
2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit?	X		
3. Does the fact sheet **or** permit contain a description of the wastewater treatment process?	X		
4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit?		X	
5. Has there been any change in streamflow characteristics since the last permit was developed?		X	
6. Does the permit allow the discharge of new or increased loadings of any pollutants?		X	
7. Does the fact sheet **or** permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses?	X		
8. Does the facility discharge to a 303(d) listed water? (downstream impairment)	X		
a. Has a TMDL been developed and approved by EPA for the impaired water?	X		
b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit?			X
c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water?		X	
9. Have any limits been removed, or are any limits less stringent, than those in the current permit?		X	

I.B. Permit/Facility Characteristics – cont.	Yes	No	N/A
10. Does the permit authorize discharges of storm water?		X	
11. Has the facility substantially enlarged or altered its operation or substantially increased its flow or production?		X	
12. Are there any production-based, technology-based effluent limits in the permit?		X	
13. Do any water quality-based effluent limit calculations differ from the State's standard policies or procedures?		X	
14. Are any WQBELs based on an interpretation of narrative criteria?		X	
15. Does the permit incorporate any variances or other exceptions to the State's standards or regulations?		X	
16. Does the permit contain a compliance schedule for any limit or condition?	X		
17. Is there a potential impact to endangered/threatened species or their habitat by the facility's discharge(s)?		X	
18. Have impacts from the discharge(s) at downstream potable water supplies been evaluated?	X		
19. Is there any indication that there is significant public interest in the permit action proposed for this facility?		X	
20. Have previous permit, application, and fact sheet been examined?	X		

Part II. NPDES Draft Permit Checklist

Region III NPDES Permit Quality Review Checklist – For Non-Municipals

II.A. Permit Cover Page/Administration	Yes	No	N/A
1. Does the fact sheet **or** permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?	X		
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?	X		

II.B. Effluent Limits – General Elements	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?	X		
2. Does the fact sheet discuss whether "antibacksliding" provisions were met for any limits that are less stringent than those in the previous NPDES permit?			X

II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ)	Yes	No	N/A
1. Is the facility subject to a national effluent limitations guideline (ELG)?		X	
a. If yes, does the record adequately document the categorization process, including an evaluation of whether the facility is a new source or an existing source?			X
b. If no, does the record indicate that a technology-based analysis based on Best Professional Judgement (BPJ) was used for all pollutants of concern discharged at treatable concentrations?			X
2. For all limits developed based on BPJ, does the record indicate that the limits are consistent with the criteria established at 40 CFR 125.3(d)?	X		
3. Does the fact sheet adequately document the calculations used to develop both ELG and /or BPJ technology-based effluent limits?	X		
4. For all limits that are based on production or flow, does the record indicate that the calculations are based on a "reasonable measure of ACTUAL production" for the facility (not design)?			X
5. Does the permit contain "tiered" limits that reflect projected increases in production or flow?		X	
a. If yes, does the permit require the facility to notify the permitting authority when alternate levels of production or flow are attained?			X
6. Are technology-based permit limits expressed in appropriate units of measure (e.g., concentration, mass, SU)?			X
7. Are all technology-based limits expressed in terms of both maximum daily, weekly average, and/or monthly average limits?			X
8. Are any final limits less stringent than required by applicable effluent limitations guidelines or BPJ?		X	

II.D. Water Quality-Based Effluent Limits	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?	X		
2. Does the record indicate that any WQBELs were derived from a completed and EPA approved TMDL?		X	
3. Does the fact sheet provide effluent characteristics for each outfall?	X		
4. Does the fact sheet document that a "reasonable potential" evaluation was performed?	X		
a. If yes, does the fact sheet indicate that the "reasonable potential" evaluation was performed in accordance with the State's approved procedures?	X		
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?	X		

II.D. Water Quality-Based Effluent Limits – cont.	Yes	No	N/A
c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have "reasonable potential"?	X		
d. Does the fact sheet indicate that the "reasonable potential" and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations where data are available)?		X	
e. Does the permit contain numeric effluent limits for all pollutants for which "reasonable potential" was determined?	X		
5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet?	X		
6. For all final WQBELs, are BOTH long-term (e.g., average monthly) AND short-term (e.g., maximum daily, weekly average, instantaneous) effluent limits established?	X		
7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)?	X		
8. Does the fact sheet indicate that an "antidegradation" review was performed in accordance with the State's approved antidegradation policy?	X		

II.E. Monitoring and Reporting Requirements	Yes	No	N/A
1. Does the permit require at least annual monitoring for all limited parameters?	X		
a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate this waiver?			X
2. Does the permit identify the physical location where monitoring is to be performed for each outfall?	X		
3. Does the permit require testing for Whole Effluent Toxicity in accordance with the State's standard practices?		X	

II.F. Special Conditions	Yes	No	N/A
1. Does the permit require development and implementation of a Best Management Practices (BMP) plan or site-specific BMPs?		X	
a. If yes, does the permit adequately incorporate and require compliance with the BMPs?			X
2. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?	X		
3. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?			X

II.G. Standard Conditions	Yes	No	N/A
1. Does the **permit** contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions?	X		

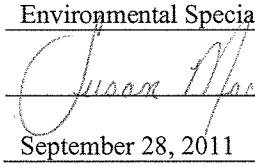
List of Standard Conditions – 40 CFR 122.41

Duty to comply	Property rights	Reporting Requirements
Duty to reapply	Duty to provide information	Planned change
Need to halt or reduce activity not a defense	Inspections and entry	Anticipated noncompliance
	Monitoring and records	Transfers
Duty to mitigate	Signatory requirement	Monitoring reports
Proper O & M	Bypass	Compliance schedules
Permit actions	Upset	24-Hour reporting
		Other non-compliance

2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for existing non-municipal dischargers regarding pollutant notification levels [40 CFR 122.42(a)]?	X		

Part III. Signature Page

Based on a review of the data and other information submitted by the permit applicant, and the draft permit and other administrative records generated by the Department/Division and/or made available to the Department/Division, the information provided on this checklist is accurate and complete, to the best of my knowledge.

Name	Susan Mackert
Title	Environmental Specialist II Senior
Signature	
Date	September 28, 2011